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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,096	07/30/2003	Birgit Kufner	P03,0274	8482
26574	7590	02/23/2007	EXAMINER	
SCHIFF HARDIN, LLP PATENT DEPARTMENT 6600 SEARS TOWER CHICAGO, IL 60606-6473			BRINEY III, WALTER F	
			ART UNIT	PAPER NUMBER
			2615	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/630,096

Applicant(s)

KUFNER, BIRGIT

Examiner

Walter F. Briney III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6, 7, 15, 16, 22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6, 7, 15, 16, 22 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. **Claims 6, 7, 22 and 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.**

Claims 6, 7, 22 and 23 contain subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

On page 7, line 24, through page 8, line 13, of the instant response the applicant alleges that the combination of Narisawa and Leedom fails to teach or suggest an opening and closing of the battery chamber in an essentially air-tight fashion. The applicant states that sealing the battery chamber is advantageous because it allows a sealing for a number of battery configurations. This advantage corresponds to the hearing aid configurations seen in figures 5-8 of applicant's specification, wherein a volume between the battery and an ambient volume in which the hearing aid resides is sealed. However, none of these figures provides sealing through rotation of a battery chamber; all require a ventilation gate, such as 35, 38B', 46 and 59. The only figures providing ventilation through rotation of a battery chamber are figures 2 and 3, but both of those only ventilate a battery, not a battery chamber. This is evidenced by the direct engagement between seal 14 and battery housing 12, just as the Leedom switch. For

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this reason, claims 6, 7, 22 and 23 contain new matter. Claim 15 does not fall into this group because it requires that the battery chamber be opened or closed in an essentially airtight fashion, but not ventilated. The phrase "opened or closed" is interpreted to mean that the chamber is either open so that the battery held inside can be removed or closed so that the battery held inside cannot be removed. In essence, claim 15 equates the battery chamber with a door and a harness for a battery, nothing more.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narisawa et al. (US Patent 6,041,128) in view of Leedom et al. (US Patent 7,010,137).**

It is noted that the rejection below has been modified; however, all modifications were made solely in the interest of clarifying the already existing grounds of rejection.

Claim 15 is limited to "a hearing aid device." Narisawa discloses a hearing aid as seen in figure 7. The hearing aid includes a "hearing aid device housing" 31 with elements 40-42. See column 8, lines 27-37. The hearing aid of Narisawa includes a battery cover 42 and battery compartment 40A that house a zinc-air battery. See column 2, lines 10-18 and column 9, lines 35-42.

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Zinc-air batteries inherently include some type of zinc particle-electrolyte solution that must be housed. A particular housing is seen in figure 2 as element 24. It is also inherent that the zinc-electrolyte mixture is provided with fresh air, which means the housing must be vented. Hence, the battery of Narisawa corresponds to the "voltage source with a voltage source housing" as recited.

Returning to figure 7, either cover 42 or compartment 40A correspond to "battery chamber configured to accept the voltage source." Both work together to form an airtight seal aside from the air passage provided by vent 42c, which will be shown to be selectively sealable in an airtight fashion by the teachings of Leedom. Currently it is noted that both the cover 42 and compartment 40A are connected to the hearing aid device, and that 42 and 40A are can be "rotated or turned" with respect to each other as seen in figures 13A, 14A, 15A and 16A. This turning motion creates a lock between elements 42 and 40A, thereby forming an airtight seal with the exception of opening 42c. See column 13, line 62, through column 14, line 25.

It is noted that Narisawa fails to provide a way of providing a perfectly airtight seal within the battery chamber as well as a ventilation mechanism as claimed.

However, these deficiencies can be overcome by an obvious modification. In particular, Leedom teaches providing multiple batteries in a behind the ear hearing aid, such as the one taught by Narisawa. Doing so provides extra capacity. In implementation, an airtight seal is formed over the inactive battery so as to not unnecessarily drain the battery that is not in current use. See figures 22 and 23. Figure 22 also depicts an advantageous manner of disabling both batteries for the purpose of extending battery

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life when the hearing aid is not in use. See column 17, lines 14-50. Modifying Narisawa in this manner provides repeatable opening and closing of an airtight seal of the battery vent disclosed by Narisawa. By first performing the locking rotation of the battery cover illustrated in figures 14A-16A of Narisawa and then closing the Leedom switch over a battery vent, an essentially airtight seal is provided. The switch comprising elements 140 and 141 corresponds to a "ventilation mechanism" as recited since its ability to repeatedly enable and prevent ventilation of batteries is performed without the disassembly of the voltage housing.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify a hearing aid to include multiple selectable batteries with an air-tight switching mechanism as taught by Leedom to realize the advantages indicated in the previous paragraph.

Claim 16 is limited in part to "the hearing aid device according to claim 15," as covered by Narisawa in view of Leedom. Clearly, either screwing or unscrewing the battery cover 42 of Narisawa into place with the battery in place will either activate or deactivate the hearing aid as screwing brings the battery into contact with the electronics of the hearing aid, where unscrewing releases contact. As noted in the rejection of claim 15, the battery chamber must be exposed to air to activate the hearing aid, but will be sealed air-tight when the hearing aid is to be deactivated. Therefore, Narisawa in view of Leedom makes obvious all limitations of the claim.

Response to Arguments

Applicant's arguments filed 14 November 2006 have been fully considered but they are not persuasive.

On page 7, line 24, through page 8, line 13, of the instant response the applicant alleges that the combination of Narisawa and Leedom fails to teach or suggest an opening and closing of the battery chamber in an essentially air-tight fashion. This contention is treated supra in the section entitled *Claim Rejections - 35 USC § 112*.

On page 8, line 14, through page 9, line 14, of the instant response the applicant first alleges that there is no teaching or suggestion as to how the battery sealing mechanism disclosed by Leedom could be implemented with the teaching of Narisawa to result in a battery chamber. This is a given, otherwise, the combination would be in the realm of anticipation. The applicant further alleges that incorporating the teachings of Narisawa and Leedom would render Narisawa inoperable for its intended purpose: the battery cover of Narisawa must be removable; incorporating Leedom eliminates the ability for the cover to be removable. Respectfully, the applicant is arguing in circles. It is not enough to presume the incorporation of Leedom eliminates the ability to remove the battery cover of Narisawa; one must prove this. To further prosecution, consider the following means of incorporation: since the top of any battery inserted into the battery chamber of Narisawa will project into the lid 42, and since the lid 42 has a ventilation opening 42c, the Leedom switch must serve as interlocutor between the battery's ventilation port and the lid's ventilation port. This places the Leedom switch into the lid 42 of Narisawa. It is noted that placing the switch in the lid also prevents the switch from blocking the thread-locking engagement of the lid to the hearing aid housing. This

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way, the lid can be screwed and unscrewed to and from housing 31, and the air vent in the lid can be repeatedly prevented from and enabled to communicate with the vent in the battery. This is equivalent to opening and closing Narisawa's battery chamber.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter F. Briney III whose telephone number is 571-272-7513. The examiner can normally be reached on M-F 8am - 4:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

wfb
2/19/07


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SUPERVISORY PATENT EXAMINER